

From: "Bottcher, Helen" <Bottcher.Helen@epa.gov>  
To: christine.m.budai@usace.army.mil  
Date: 7/29/2022 3:03:48 PM  
Subject: FW: PSET review - Bonneville Nav Lock 2 Shoal - draft SQER  
Attachments: 20220729 VTD Bon Navlock 2 Shoal SQER.pdf

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Hi, Chris. Sorry – I meant to mention this during our call yesterday.

Have a good weekend,

Helen

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**From:** Bottcher, Helen  
**Sent:** Friday, July 29, 2022 3:02 PM  
**To:** Holm, James A CIV USARMY CENWP (USA) <James.A.Holm@usace.army.mil>  
**Cc:** Francis, Richard <Francis.Richard@epa.gov>  
**Subject:** RE: PSET review - Bonneville Nav Lock 2 Shoal - draft SQER

Hi, James.

Thank you for meeting with EPA this week (on July 27) and walking us through the Nav Lock 2 dredging project plans.

EPA does not have any concerns from the CERCLA Superfund site perspective. Hope your project goes well!

Thanks for the final SQER (attached); I will keep a copy in our files in case any questions arise in the future.

Regards,

Helen Bottcher

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**From:** Holm, James A CIV USARMY CENWP (USA) <James.A.Holm@usace.army.mil>  
**Sent:** Friday, July 29, 2022 10:33 AM  
**To:** Lohrman, Bridgette <lohrman.bridgette@epa.gov>; Inouye, Laura (ECY) <Lino461@ECY.WA.GOV>; Pete Anderson <ANDERSON.Peter@deq.state.or.us>; Tom Hausmann - NOAA Federal (tom.hausmann@noaa.gov) <tom.hausmann@noaa.gov>; Jeremy\_Buck@fws.gov; Bottcher, Helen <Bottcher.Helen@epa.gov>; Francis, Richard <Francis.Richard@epa.gov>  
**Cc:** Yballe, Dominic P CIV USARMY CENWP (USA) <Dominic.P.Yballe@usace.army.mil>; Lynch, Samantha M (Sam) CIV USARMY CENWP (USA) <Samantha.M.Lynch@usace.army.mil>; Carlson, Daniel J CIV USARMY CENWS (USA) <Daniel.J.Carlson@usace.army.mil>; christine.m.budai@usace.army.mil; Gardiner, William W CIV USARMY CENWS (USA) <William.W.Gardiner@usace.army.mil>; Kerns, Kristen M CIV USARMY CENWS (USA) <Kristen.Kerns@usace.army.mil>  
**Subject:** RE: PSET review - Bonneville Nav Lock 2 Shoal - draft SQER

Happy Friday, July 29, 2022

Attached is the final PDF of the SQER for the VTD Bonneville NL2 shoal. We added in the TBT data (all non-detect). I'll send out the draft SDM early next week.

Thanks!  
James

James A. Holm  
Sediment Quality Team: Biologist & PSET Lead

Waterways Maintenance, Channels and Harbors  
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503-808-4963 (desk), (b)(6) (cell)  
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*Pronouns: He, Him, His*

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**From:** Holm, James A CIV USARMY CENWP (USA)  
**Sent:** Tuesday, July 26, 2022 4:19 PM  
**To:** Lohrman, Bridgette <[lohrman.bridgette@epa.gov](mailto:lohrman.bridgette@epa.gov)>; Inouye, Laura (ECY) <[Lino461@ECY.WA.GOV](mailto:Lino461@ECY.WA.GOV)>; Pete Anderson <[ANDERSON.Peter@deq.state.or.us](mailto:ANDERSON.Peter@deq.state.or.us)>; Tom Hausmann - NOAA Federal ([tom.hausmann@noaa.gov](mailto:tom.hausmann@noaa.gov)) <[tom.hausmann@noaa.gov](mailto:tom.hausmann@noaa.gov)>; Jeremy\_Buck@fws.gov; Bottcher, Helen <[Bottcher.Helen@epa.gov](mailto:Bottcher.Helen@epa.gov)>; Francis, Richard <[Francis.Richard@epa.gov](mailto:Francis.Richard@epa.gov)>  
**Cc:** Yballe, Dominic P CIV USARMY CENWP (USA) <[Dominic.P.Yballe@usace.army.mil](mailto:Dominic.P.Yballe@usace.army.mil)>; Samantha.M.Lynch@usace.army.mil; Carlson, Daniel J CIV USARMY CENWS (USA) <[Daniel.J.Carlson@usace.army.mil](mailto:Daniel.J.Carlson@usace.army.mil)>; BUDAI, Christine M (Chris) CIV USARMY CENWP (USA) <[Christine.M.Budai@usace.army.mil](mailto:Christine.M.Budai@usace.army.mil)>; Gardiner, William W CIV USARMY CENWS (USA) <[William.W.Gardiner@usace.army.mil](mailto:William.W.Gardiner@usace.army.mil)>; Kerns, Kristen M CIV USARMY CENWS (USA) <[Kristen.Kerns@usace.army.mil](mailto:Kristen.Kerns@usace.army.mil)>  
**Subject:** RE: PSET review - Bonneville Nav Lock 2 Shoal - draft SQER

Hi All,

Attached is the updated sediment report for the VTD Nav Lock 2 downstream shoal. Also included are the sediment chemistry lab's (ARI) report and the physical/TOC lab's (ALS) report for your files.

We will be reviewing at 2:00 PM tomorrow. EPA Cleanup staff will join us as well.

Thanks,  
James

James A. Holm  
Sediment Quality Team: Biologist & PSET Lead  
Waterways Maintenance, Channels and Harbors  
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*Pronouns: He, Him, His*

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**From:** Holm, James A CIV USARMY CENWP (USA)  
**Sent:** Monday, July 18, 2022 4:48 PM  
**To:** Lohrman, Bridgette <[lohrman.bridgette@epa.gov](mailto:lohrman.bridgette@epa.gov)>; Inouye, Laura (ECY) <[Lino461@ECY.WA.GOV](mailto:Lino461@ECY.WA.GOV)>; Pete Anderson <[ANDERSON.Peter@deq.state.or.us](mailto:ANDERSON.Peter@deq.state.or.us)>; Tom Hausmann - NOAA Federal ([tom.hausmann@noaa.gov](mailto:tom.hausmann@noaa.gov)) <[tom.hausmann@noaa.gov](mailto:tom.hausmann@noaa.gov)>; Jeremy\_Buck@fws.gov; BUDAI, Christine M (Chris) CIV USARMY CENWP (USA) <[Christine.M.Budai@usace.army.mil](mailto:Christine.M.Budai@usace.army.mil)>; Bottcher, Helen <[Bottcher.Helen@epa.gov](mailto:Bottcher.Helen@epa.gov)>; Carlson, Daniel J CIV USARMY CENWS (USA) <[Daniel.J.Carlson@usace.army.mil](mailto:Daniel.J.Carlson@usace.army.mil)>; Francis, Richard <[Francis.Richard@epa.gov](mailto:Francis.Richard@epa.gov)>  
**Cc:** Yballe, Dominic P CIV USARMY CENWP (USA) <[Dominic.P.Yballe@usace.army.mil](mailto:Dominic.P.Yballe@usace.army.mil)>; Samantha.M.Lynch@usace.army.mil  
**Subject:** PSET review - Bonneville Nav Lock 2 Shoal - draft SQER

Hi PSET,

Here is the draft SQER for the two shoals (1 in the nav channel, 1 just north) at the downstream entrance to Navigation Lock 2 at Bonneville Dam. Both shoals suitable. Please take a look before our call on Wednesday

afternoon. Below is the SAP approval to jog your memories on this project.

Hi Chris, Daniel, Helen, and Richard,

As discussed on 19 May web meeting, attached is the draft sediment report for Clean Water Act compliance covering the minor maintenance dredging in the Vancouver to The Dalles federal navigation channel downstream of Bonneville Dam and the Bradford Island Superfund Site. Neither shoal sampled detected Total PCB Aroclors (MRL was 4.0 ug/kg). Let me know if you'd like to join PSET for our review this Wednesday (we meet every week). We start at 1:05 PM and end at 2:30 PM. Let me know if there is ~20-30 minute window that works best for you. We can set up a standalone meeting as well to get your feedback.

Sincerely,  
James

James A. Holm  
Sediment Quality Team: Biologist & PSET Lead  
Waterways Maintenance, Channels and Harbors  
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*Pronouns: He, Him, His*

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**From:** Lohrman, Bridgette <[lohrman.bridgette@epa.gov](mailto:lohrman.bridgette@epa.gov)>  
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**To:** Stokke, Jessica B CIV USARMY CENWP (USA) <[jessica.b.stokke@usace.army.mil](mailto:jessica.b.stokke@usace.army.mil)>  
**Cc:** Holm, James A CIV USARMY CENWP (USA) <[James.A.Holm@usace.army.mil](mailto:James.A.Holm@usace.army.mil)>; Yballe, Dominic P CIV USARMY CENWP (USA) <[Dominic.P.Yballe@usace.army.mil](mailto:Dominic.P.Yballe@usace.army.mil)>; Inouye, Laura (ECY) <[Lino461@ECY.WA.GOV](mailto:Lino461@ECY.WA.GOV)>; Pete Anderson <[ANDERSON.Peter@deq.state.or.us](mailto:ANDERSON.Peter@deq.state.or.us)>; Jeremy\_Buck@fws.gov; Tom Hausmann - NOAA Federal <[tom.hausmann@noaa.gov](mailto:tom.hausmann@noaa.gov)>  
**Subject:** [Non-DoD Source] PSET - Bonneville Shoal - SAP Approval

Hello Jessica,

The interagency Portland Sediment Evaluation Team (PSET) has reviewed the March 2, 2022 "Vancouver to the Dalles, Federal Navigation Channel, Bonneville Dam Navigation Lock 2, Downstream Entrance Shoal, Multnomah County, Oregon Sediment Sampling and Analysis Plan" (SAP) for potential maintenance dredging. The project is located on the Columbia River at river mile (RM) ~145.

**CONSISTENCY DETERMINATION:** The US Army Corps of Engineers – Portland District (Corps) may proceed with sediment sampling. The PSET reviewed the SAP per the 2018 Sediment Evaluation Framework for the Pacific Northwest (SEF). The agencies have determined that the SAP is consistent with the SEF.

**REVIEWING PSET AGENCIES:** U.S. Army Corps of Engineers (Corps), U.S. Environmental Protection Agency, Oregon Department of Environmental Quality (DEQ), Washington Department of Ecology, U.S. Fish and Wildlife Service, National Marine Fisheries Service.

**PROJECT DESCRIPTION:** Since 2018, a shoal has been forming in the Vancouver to the Dalles (VTD) federal navigation channel at the downstream end of the Bonneville Dam Navigation Lock 2 (NL2), located southwest of Robins Island. Outside of the channel, another shoal is forming north of the NL2 shoal. The VTD federal navigation channel is 300 feet wide and authorized to -27 feet Columbia River Datum (CRD), but only maintained to -17 feet plus 2 feet of overdredge. The estimated dredge volume is approximately 2,500 cubic yards (CY) to a dredge depth of -19 feet CRD. Grain size and total organic carbon (TOC) will be analyzed initially, with contingency chemical testing if sediment is composed of more than 20% silts and clays or if the TOC is higher than 0.5%. If sediments are predominately fine visually, chemical analyses will be automatically conducted.

**SITE HISTORY:** Sediment investigations have been conducted in other areas of Bonneville Dam (Bradford Island, trash

racks, forebays, fish ladders, and entrance to Navigation Lock 1). At Bradford Island upstream of the dam and NL2, polychlorinated biphenyls (PCBs) are a known contaminant of concern (CoC) from legacy contamination.

In 2011, mercury was previously detected at the downstream entrance to the Bradford Island fish ladder. The detected concentrations (average 0.362 mg/kg) exceeded the 2009 SEF freshwater screening level of 0.28 mg/kg; however, this value is less than the 2018 SEF screening level of 0.66 mg/kg.

Based on 2019 and 2020 diver-assisted videos of the sediments in the upstream Navigation Lock 1 stoplog area, sediments appear to be coarse to fine sands with silt visible in the disturbed sediment surface. No obvious debris, logs, or trash was visible on the sediment surface in the videos.

In August 2021, the Corps collected a two-point composite sample from the upstream portion of Navigation Lock 1 to support replacement of the stoplogs. The sediment was analyzed for grain size, total organic carbon (TOC), total solids (TOS), metals, PAHs/SVOCs, pesticides, PCBs as Aroclors, and butyltins. The sediment was composed of 2.2% gravel, 72% sands, and 25.8% fines. All detections and non-detect method reporting limits were below the SEF freshwater screening levels.

LEVEL 2A SEDIMENT SAMPLING AND ANALYSIS: Two 2-point composite samples will be collected with a PONAR surface grab sampler. Field compositing is planned for this sampling event and discrete samples from each station will be archived. Composite samples will be analyzed from inside and outside the federal channel. Proper QA/QC procedures as outlined in the SAP will be followed. Any deviation from these procedures will be noted in the field forms.

The sample IDs, DMMU IDs, station IDs, station coordinates, and sample depths are detailed in the SAP Table 3.

INTERPRETATION OF ANALYTICAL RESULTS: If chemical analyses are conducted, the analytical results will be compared to the 2018 SEF freshwater benthic toxicity screening levels and ODEQ's freshwater fish-based bioaccumulative screening level value (SLV) for PCB Aroclors of 22 ug/kg dry weight (sediment value for protection of fish). The analytical laboratories should achieve detection limits below the SEF SLs/ODEQ SLVs. If the labs are unable to achieve these detection limits, the laboratory case narrative shall explain what efforts were taken to lower the detection limits.

These results will inform the suitability of dredged material for unconfined, aquatic disposal and inform the suitability of the post-dredge surface for unconfined, aquatic exposure. Results will also indicate if the shoal was formed naturally or by anthropogenic activities, the need for dredging operational controls, post-dredge sampling, or sediment management of the post-dredge surface. Based on the analytical results of this sampling event, the PSET will re-evaluate the proposed "low" management area rank for the project.

CONTACT: If you have questions regarding this determination, please contact me at 503.326.4006 or [lohrman.bridgette@epa.gov](mailto:lohrman.bridgette@epa.gov).

Sincerely,

~Bridgette

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**Bridgette Lohrman | Ecologist | U.S. Environmental Protection Agency**  
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